

Mineral Industry Surveys

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SILVER IN JANUARY 2004

U.S. mines produced 100,000 kilograms (kg) of silver in January 2004, according to the U.S. Geological Survey. Compared with that of December 2003, production of silver was down 12%. Total silver production in 2003 was about 1,240 metric tons (t), 13% less than total production in 2002.

Coeur d'Alene, ID-based Hecla Mining Company announced that it planned to drive a 1,680-meter drift on the 5900 level of the Lucky Friday silver mine in northern Idaho. The new drift will be driven at about 1.6 kilometers north of the Luck Friday shaft. Hecla expects the developmental drift to cost approximately \$8 million and should give Hecla access to an additional 870 t of silver. The new development reportedly will allow the mine to double production up to 124 t of silver annually. Preparation at the new development level began in January 2004. Included are two ventilation rises that connect the new level to the rises on the 4900 level. Also included in the preparations are the excavation of ore passes and chutes, a maintenance shop, and a chiller. Production from the new level is expected to begin in late 2005 with anticipated cash costs of production of less than \$4.50 per ounce of silver. The Lucky Friday Mine has 94 employees. When the new drift is completed and full production is reached, the mine will increase employment by up to 50%. Hecla has been operating the Lucky Friday Mine for 45 years, during which it produced more than 3,950 t of silver (Hecla Mining Company, 2004).

Coeur d'Alene Mines Corporation reported that in the week

of January 4, 2004, its Rochester Mine (Nevada) surpassed 3,110 t (100 million ounces) of silver and 31.1 t (1 million ounces) of gold production since operations began in 1986. During the fourth quarter of 2003, Rochester produced 43,500 kg of silver and 346 kg of gold. Total production in 2003 was 174,200 kg of silver and 1,630 kg of gold. The 2003 average cash cost for silver was \$4.67 per ounce. The Coeur Silver Valley-Galena Mine (Idaho) produced 31,100 kg of silver in the fourth quarter of 2003 and 115,100 kg during the entire year. The average cash cost at Galena for 2003 was \$4.66 per ounce of silver (Coeur d'Alene Mines Corporation, 2004).

The Zhijiaodi silver mine in Lingqiu County of Shanxi Province, China, was officially put into production on January 12, 2004. The operation, one of China's largest silver mines, is mostly engaged in the mining, dressing, and smelting of silver. However, the mine also produces lead and zinc. Construction of the mine began in 2001, and trial operations began in April 2003. At full production, the mine is expected to produce 40,000 kg of silver and 2,000 t of lead and zinc metal per year (Antaike Precious & Minor Metals Monthly, 2004, p. 3).

References Cited

- Antaike Precious & Minor Metals Monthly, 2004, A large silver mine [to] be on stream in China: Antaike Precious & Minor Metals Monthly, no. 49, February & March, 20 p.
Coeur d'Alene Mines Corporation, 2004, Coeur reports 4th quarter and 2003 results: Coeur d'Alene, ID, Coeur d'Alene Mines Corporation news release,

Notice

Beginning in January 2004, the monthly data published in the Mineral Industry Surveys (MIS) for "precious metals" will be published as three separate MIS. The new monthly MIS will be "gold," "silver," and "platinum-group metals;" this change conforms monthly reporting with annual reporting. The 2003 monthly MIS for "precious metals" will remain on the USGS minerals information Web site until the January 2005 MIS for "gold," "silver," and "platinum-group metals" are published.

February 19, 12 p.
Hecla Mining Company, 2004, Hecla to access 28 million ounces of silver on

Lucky Friday's 5900 level: Coeur d'Alene, ID, Hecla Mining Company news
release, December 5, 2 p.

TABLE 1
MINE PRODUCTION OF RECOVERABLE SILVER
IN THE UNITED STATES, BY STATE¹

(Kilograms)			
	Nevada	Other States ²	Total
2003 ^P :			
January	24,700	81,400	106,000
February	19,600	75,300	94,800
March	25,800	83,400	109,000
April	21,500	71,500	93,000
May	27,700	78,400	106,000
June	26,600	79,000	106,000
July	28,900	69,600	98,500
August	28,800	68,100	96,900
September	32,200	73,700	106,000
October	28,600	77,600	106,000
November	30,600	74,800	105,000
December	34,300	78,600	113,000
January-December	329,000	911,000	1,240,000
2004, January	30,800	69,600	100,000

^PPreliminary.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes Alaska, Arizona, California, Colorado, Idaho, Missouri, Montana, Utah, and Washington.

TABLE 2
SILVER PRICES

(Dollars per troy ounce)

Engelhard Industries:	
2003:	
Low/date	4.39 March 24
High/date	5.98 December 31
Average	4.91
2004:	
January:	
Low/date	6.23/5, 21, 29
High/date	6.68/12
Average	6.37
Handy and Harman:	
2003, average	4.91
2004, January	6.37
London Final: ¹	
2003, average	4.88
2004, January	6.33

¹Reported as "London Spot/US Equiv."

Source: Platts Metals Week.

TABLE 3
U.S. IMPORTS OF SILVER, BY COUNTRY¹

Period and country	Bullion		Doré		Ores and concentrates ²		Ash and residues		Total	
	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)
2002	4,020,000	\$593,000	16,600	\$4,430	61,000	\$13,100	63,500	\$11,600	4,160,000	\$622,000
2003:										
October	704,000	113,000	18,000	5,830	547	439	11,200	1,090	734,000	120,000
November	257,000	41,600	25,000	6,970	--	--	6,490	898	288,000	49,400
December:										
Australia ³	--	--	--	--	--	--	1	100	1	100
Canada ³	135,000	24,300	94	15	329	280	12,600	1,530	148,000	26,200
Dominican Republic ³	--	--	--	--	--	--	101	89	101	89
Germany	--	--	--	--	--	--	(4)	29	(4)	29
Mexico ³	156,000	26,600	26,700	9,060	--	--	(4)	29	182,000	35,700
Panama	26	4	--	--	--	--	--	--	26	4
Peru	31,500	5,160	3,280	725	--	--	--	--	34,800	5,880
Poland	40,000	6,760	--	--	--	--	--	--	40,000	6,760
Switzerland	--	--	--	--	--	--	10	12	10	12
Taiwan ³	--	--	--	--	--	--	882	147	882	147
Total	362,000	62,900	30,000	9,800	329	280	13,600	1,930	406,000	74,900
Year to date	4,000,000	630,000	233,000	72,200	2,540	1,590	92,600	14,000	4,330,000	717,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes silver content of base metal ores and concentrates.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

⁴Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS OF SILVER, BY COUNTRY¹

Period and country	Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semimanufactured forms ² (gross weight)		Waste and scrap (gross weight)	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2002	263,000	\$38,700	12,100	\$2,540	572	\$103	289,000	\$37,800	816,000	\$117,000
2003:										
October	14,900	2,420	2,910	665	--	--	41,300	5,440	88,600	13,400
November	14,800	2,460	3,220	677	--	--	35,000	5,430	32,300	8,000
December:										
Brazil ³	--	--	--	--	--	--	11,300	1,300	--	--
Canada ³	--	--	170	14	--	--	512	103	6,750	1,680
China	--	--	--	--	--	--	361	50	--	--
Costa Rica	--	--	--	--	--	--	--	--	10,300	585
Dominican Republic	--	--	--	--	--	--	--	--	116	277
France ³	--	--	--	--	--	--	341	83	10	184
Germany ³	--	--	490	94	--	--	3,430	2,400	89	160
India	95	19	--	--	--	--	706	130	--	--
Italy ³	6	17	--	--	--	--	1,230	228	30	603
Japan ³	--	--	1,220	286	--	--	1,490	467	426	186
Jordan	--	--	--	--	--	--	--	--	280	55
Korea, Republic of ³	--	--	--	--	--	--	1,130	118	--	--
Mauritius	--	--	--	--	--	--	--	--	231	53
Mexico ³	5,890	927	--	--	--	--	--	--	5,410	2,340
Philippines	--	--	--	--	--	--	--	--	6,360	160
Poland ³	--	--	--	--	--	--	2,870	334	--	--
Switzerland	--	--	--	--	--	--	100	23	--	--
Taiwan	--	--	--	--	--	--	62	9	--	--
United Kingdom	--	--	--	--	--	--	--	--	793	229
Venezuela	--	--	--	--	--	--	--	--	844	4,620
Other ³	--	--	--	--	25	7	31	106	119	779
Total	5,990	964	1,880	395	25	7	23,600	5,350	31,800	11,900
Year to date	281,000	42,200	20,800	4,160	661	96	355,000	49,900	886,000	107,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Containing 99.5% or more by weight of silver.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF SILVER, BY COUNTRY¹

Period and country	Bullion		Doré		Ores and concentrates ²		Total	
	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)
2002	624,000	\$97,900	22,700	\$3,360	230,000	\$56,600	877,000	\$158,000
2003:								
October	185	29	1,420	242	3	6	1,610	277
November	208	36	1,450	253	71	16	1,730	305
December:								
Canada	525	100	--	--	--	--	525	100
Japan	42	10	--	--	--	--	42	10
Mexico	24	4	--	--	--	--	24	4
Netherlands	71	14	--	--	--	--	71	14
Switzerland	--	--	1,650	309	--	--	1,650	309
Other ³	82	15	--	--	39	14	121	29
Total	744	143	1,650	309	39	14	2,430	466
Year to date	135,000	20,700	19,800	3,200	57,900	16,200	212,000	40,100

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes silver content of base metal ores and concentrates.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF SILVER, BY COUNTRY¹

Period and country	Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semimanufactured forms ² (gross weight)		Waste and scrap (gross weight)	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2002	32,700	\$9,960	360,000	\$63,600	81,200	\$9,560	290,000	\$50,300	2,380,000	\$555,000
2003:										
October	4,010	898	40,400	6,990	4,450	636	24,800	4,320	148,000	31,000
November	846	181	45,800	7,890	9,880	1,160	22,000	3,810	124,000	27,800
December:										
Belgium	--	--	192	33	--	--	295	50	7,310	1,150
Brazil	--	--	--	--	--	--	1,020	173	--	--
Canada ³	502	99	1,050	181	2,250	312	2,470	420	18,700	3,310
China	--	--	--	--	1,600	166	380	65	35,900	4,720
Finland	--	--	582	99	--	--	--	--	--	--
France	--	--	566	104	--	--	293	50	2,420	225
Germany ³	--	--	632	108	--	--	88	19	15,200	3,360
Hong Kong	--	--	2,620	446	--	--	1,950	330	--	--
Italy ³	--	--	8,240	1,400	6	4	64	11	14,000	4,130
Jamaica	--	--	--	--	--	--	203	35	--	--
Japan ³	63	17	4,060	716	--	--	2,360	401	301	3,430
Jordan	--	--	--	--	--	--	167	32	--	--
Korea, Republic of	--	--	8,540	1,460	--	--	4,310	732	1,030	134
Mexico ³	1,250	275	530	90	946	111	748	188	--	--
Netherlands	--	--	1,440	245	--	--	450	77	--	--
Netherlands Antilles	106	23	--	--	--	--	--	--	--	--
Panama ³	110	32	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	189	32	--	--
Saudi Arabia	--	--	--	--	--	--	44	8	11,700	2,100
Singapore	--	--	293	49	--	--	826	142	--	--
South Africa	--	--	--	--	--	--	--	--	7,160	511
Spain	--	--	--	--	--	--	1,080	184	--	--
Sweden	--	--	552	94	--	--	--	--	5,170	671
Switzerland ³	--	--	148	26	--	--	15	3	--	--
Taiwan ³	40	10	6,960	1,180	92	22	635	110	1,030	134
United Arab Emirates	--	--	--	--	--	--	--	--	113	23
United Kingdom	--	--	7,130	1,220	--	--	1,550	266	10,600	10,300
Uruguay	--	--	--	--	--	--	2,240	381	139	18
Other ³	203	45	--	--	--	--	362	63	162	38
Total	2,270	502	43,500	7,450	4,890	615	21,700	3,770	131,000	34,300
Year to date	26,000	5,470	473,000	81,500	69,200	9,120	344,000	59,400	2,020,000	410,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Containing 99.5% or more by weight of silver.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.